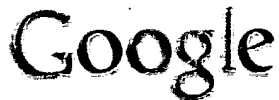


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hydrogel soil

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## Patent Search

Patents 1 - 100 of 221 on hydrogel soil. (0.06 seconds)

Hydratable form of keratin for use as a **soil** amendment

US Pat. 6649740 - Filed Mar 1, 2000 - Keraplast Technologies, Ltd.

The keratin material may also be at least partially hydrated prior to addition to the **soil** such that it is in a **hydrogel** state. The **hydrogel** may be added to ...Urban tree **soil** to safely increase rooting volumes

US Pat. 5849069 - Filed Apr 23, 1996 - Cornell Research Foundation, Inc.

This could be attributed to swelling of the **hydrogel** in the **soil** separating the **soil** aggregates reducing the dry density of the **soil**. ...**Soil** conditioner and method of producing the same

US Pat. 5013349 - Filed Aug 17, 1983 - Japan Exlan Company Limited

Since the filler is integrally included in **hydrogel**, the **soil** conditioner, when mixed with **soil**, does not separate into the respective components, ...Plant growth media utilizing polyurethane **hydrogel**

US Pat. 4241537 - Filed May 10, 1979 - W. R. Grace &amp; Co.

The gel **soil** plug 1 is generally shaped optionally contain plant growth additives ... 5. h molded in the gel **soil** plug 1 and extends through the from thm ...non-porous bag  
water soluble polymer (etOH)

Metal value recovery or removal from aqueous media

US Pat. 5116415 - Filed Sep 25, 1990 - AQS, Inc.

... complex material could be substituted by a simpler **hydrogel**. ... Inc.)**hydrogel soil** additives which are used the processes of this both utilize ...Method for producing a barrier layer in **soil**

US Pat. 5120344 - Filed Aug 13, 1991 - Altalanos Iparfejlesztési Rt.

It is, however, much more simple, economic and advantageous to introduce the gel into the **soil** as a **hydrogel** (ie as a water-containing gel) at the rate of ...Treatment of seeds with coatings containing **hydrogel**

US Pat. 6557298 - Filed Sep 10, 2001 - Monsanto Technology, LLC

In addition, applying the active agent to the **soil** in which the seeds are ... by coating the seeds in a water- saturated **hydrogel** containing the agents. ...4581844  
6599989  
PELLETS  
in hydrogel  
incontinent  
pads  
search -  
for soilSupport for cultivating plant and method of growing plant

US Pat. 6427378 - Filed Dec 20, 1999

... the plant-cultivating support, **soil**-modifying agent, vessel, or sheet comprising the resultant **hydrogel** or polymer as a constitution element thereof ...Conversion of cellulosic waste to a **soil** improvement complex

US Pat. 5762678 - Filed Aug 5, 1996

The **soil** improvement complex of claim 1 wherein the ment chamber; ... The method of claim 15 wherein the step of shaping **hydrogel** being permeable to plant ...

hydrogel sponge / cellulose

Extension of polyurethane **hydrogel** cure time

US Pat. 4383079 - Filed Apr 9, 1981 - Minnesota Mining and Manufacturing Company

[http://www.google.com/patents?as\\_q=hydrogel&num=100&btnG=Google+Search&as\\_ep...](http://www.google.com/patents?as_q=hydrogel&num=100&btnG=Google+Search&as_ep...) 1/19/2007

**EXTENSION OF POLYURETHANE HYDROGEL CURE TIME DESCRIPTION 1.** Technical Field The invention ... or into **soil** per se where it cures to form the **hydrogel**. ...

Absorbent composition comprising **hydrogel**-forming polymeric material and fiber bundles  
US Pat. 5800417 - Filed Dec 12, 1995

... A: Description of S. Kyoto, "**Soil** Conditioner For Dry Fields. ... The absorbent composition comprises a **hydrogel**-forming polymeric material in an ...

#### Support for cultivating plant

US Pat. 6032409 - Filed Mar 4, 1998 - Mukoyama Orchids, Ltd.

Accordingly, an excess amount of these sub-stances are not present in the outside of the **hydrogel** (or in another carrier such as **soil**), ...

#### Measurement of water content

US Pat. 5694806 - Filed Jan 19, 1996 - University of Strathclyde

The elevation and end elevation of a further embodiment **hydrogel** should ...

A depth marker solid medium such as **soil**, part of the **hydrogel** will be the ...

#### Means for protecting underground electrical equipment from thermal runaway

US Pat. 4097682 - Filed Aug 27, 1976 - Electric Power Research Institute, Inc.

Thereafter, cables are laid in the trench and back-filled **soil** 20 removed during

... by Union Carbide Corporation under the trademark "Viterra" **hydrogel**. ...

#### Plant growth media comprising cross-linked **hydrogel** particles

US Pat. 5382270 - Filed Sep 9, 1993 - University of Strathclyde

The **hydrogel** polymer appears to be highly effective for use as a **soil** 15 conditioner in horticulture, to improve crop tolerance and growth in a sand or ...

#### Method of controlling the relative humidity in a **soil** environment and apparatus for accomplishing same

US Pat. 4182357 - Filed Mar 2, 1978

The method of claim 1 wherein said preselected slightly cross-linked **hydrogel**, which membrane forms value is prescribed by the concentration of said ...

#### Process for preparing a **hydrogel**

US Pat. 4664857 - Filed Jun 27, 1985 - Nippon Oil Company, Limited

dilute aqueous solution) over the said surface **soil**, an attempt to improve the

... According to the present invention, a **hydrogel** having a high mechanical ...

#### Aqueous polyurethane gel, process for producing the same, and use thereof

US Pat. 6528577 - Filed Dec 19, 2001 - Kansai Paint Co., Ltd.

This **hydrogel** was added to the **soil** of a potted viola, copolymer prepared by copolymerization of ethylene which is an ornamental plant, in an amount of 25 ...

etch gel properties

#### ASPHALT EMULSION

US Pat. 2706688 - Filed Mar 25, 1950

However, it has been noted that, upon formation of silica **hydrogel** from such ... , have been found to decompose due to **soil** bacterial action, therefore, ...

#### Fungal inoculum preparation

US Pat. 5786188 - Filed Jun 5, 1996 - The United States of America as represented by the Secretary of Agriculture

Biology and Control of **Soil**-Borne Plant Pathogens. ... Alginate **hydrogel** can be sterilized by autoclaving or by  $\gamma$  irradiation (Trevors, JT, et al., supra, ...

Matric potential responder improvements

US Pat. 6782909 - Filed Jun 11, 2001

In this case, a **hydrogel** is again chosen which is 2-ultrahigh molecule ...  
in a way described to make it directly responsive to **soil** matric potential. ...

Plant fertilization using a microbiological system for phosphorus extraction and distribution

US Pat. 4589225 - Filed Mar 11, 1983

... upon introduction which include species of *Bacillus*, *Pseudomonas* and into the  
**soil**. ... the nutrient **hydrogel** 48, when hy- in th **soil** or other growth ...

Water-holding carrier for plants

US Pat. 6286254 - Filed Feb 1, 1999 - Mebiol Inc.

Particularly, when the conventional polyacrylic acid-type 40 **hydrogel** is used  
... was markedly inhibited in a **soil** which had been mixed with a crosslinked ...

Cartridges of fast setting cement and gelled water

US Pat. 4772326 - Filed Jan 27, 1987 - Construction Products Research, Inc.

RH Karol, Field Pull-Out Tests of Reinforcing Bars Grouted with Roc-Loc Mining  
Kits (Cyanamid Engineer-ing Chemicals) 2/21/66. Viterra 2 **Hydrogel Soil** ...

Production of hydrogels

US Pat. 4367323 - Filed Dec 2, 1981 - Sumitomo Chemical Company, Limited

For instance, when the **hydrogel** is mixed with a employed so far as it has the  
affinity to organic solvent, **soil** to be utilized as a **soil** water-retaining ...

Control valves and method of plant growing using flow control

US Pat. 5273066 - Filed Feb 8, 1991

The **hydrogel** polymer appears to be highly effective for use as a **soil** conditioner  
in horticulture, to improve crop tolerance and growth in a sand or light ...

Heat pump system with improved heat transfer

US Pat. 4042012 - Filed Aug 27, 1976 - Electric Power Research Institute

No. to the heating of the **soil** b solar energy during the APPLICATION ... and 30  
from Union Carbide suggests that the Viterra **hydrogel** the subscripts c and h ...

Aluminosilicate **hydrogel** bonded aggregate articles

US Pat. 4432798 - Filed Dec 14, 1981 - The Duriron Company, Inc.

... the total of which comprise a few percent **soil** hardener primarily of a soluble  
... Within the overall workable range of the **hydrogel** binder system, ...

**SOIL REDEPOSITION INHIBITION AGENTS AND SYSTEMS**

US Pat. 7094748 - Filed Feb 12, 2002 - eb for processing integrity and use

... **soil** redeposition inhibiting agents can be "Tear Resistant Porous Extensible Web"  
... By "**hydrogel**" as used herein is meant an inor- 45 point bonded ...

Fungal inoculum preparation

US Pat. 6143549 - Filed Mar 12, 1998 - The United States of America as represented by the Secretary of Agriculture

Currently, lignin-degrading fungi are delivered to **soil** via 65 various ...  
Preferably, this hydrophilic material is a **hydrogel**, such as an alginate or ...

Heat pump system with improved heat transfer

US Pat. 4142576 - Filed May 26, 1977 - Electric Power Research Institute, Inc.

In addition, the film should the Gel-Guard and Viterra **hydrogel** products are ...  
such as polyethylene or polypro- for possible special **soil** applications. ...

Water-retaining support for plants and plant body-growing water-retaining material

US Pat. 6615539 - Filed Aug 13, 2001 - M&amp;M Laboratory Co., Ltd.

Particularly, when the conventional polyacrylic acid-type **hydrogel** used as ...  
the elongation of soybean root was markedly a **soil** which had been mixed with ...

Slow-curing water-curable urethane prepolymer composition

US Pat. 4322327 - Filed Oct 14, 1980 - Mitsubishi Petrochemical Co., Ltd.

... of the materials mixtures of these compounds. into the cracks or the **soil**,  
... long time for curing and form **hydrogel** containing Examples of the ...

Hydrogels with increased organic solvent soluble active agent loading capacity, their preparation and the use thereof

US Pat. 4873086 - Filed Aug 8, 1988 - Ciba-Geigy Corporation

For agricultural purposes, the active agent loaded **hydrogel** can be incorporated  
into the **soil** to release the active herbicide, insecticide, nutrient, ...

Method of soil erosion control

US Pat. 5860770 - Filed Jun 10, 1997 - A Creative Research &amp; Testing Co.

The result is a **hydrogel** state which develops to stabilize the **soil** mixture to  
form a bond between the rubber crumb and/or other ingredients in the **soil** ...

Contact lens cleaning solution

US Pat. 6478881 - Filed Feb 28, 2001 - Vista Scientific L.L.C.

For soft **hydrogel** lenses there are 55 a number of products available that are  
considered ... One role is to "solubilize" the **soil** on the lens into micelles. ...

Seed germination medium

US Pat. 6681521 - Filed Feb 27, 2002 - Terraseed Limited

Treat- Seed A-100 PEO Calcium- 35 ment Seed mat (Bacteria) Pa **Hydrogel** Bentonite  
... The top of the bed was levelled and **soil** was moved to the outer edge. ...

Balanced charge polymer and hydrophilic contact lens manufactured therefrom

US Pat. 5391669 - Filed Nov 9, 1993 - Hydron Limited

This interaction of **hydrogel** polymer surface cationic-anionic pair of ethylenically  
unsaturated mono- and **soil** represents a significant disadvantage for ...

Delivery system for seeds

US Pat. 4779376 - Filed Apr 14, 1986 - Plant Genetics, Inc.

The resultant mixture is com-bined with water to form a non-sticky **hydrogel**.  
The **hydrogel**, combined with seeds, is poured or dribbled along a row of **soil** to ...

Dried particulate, hydrophilic gel as micronutrient delivery system

US Pat. 5632799 - Filed Sep 23, 1994 - Tennessee Valley Authority

The effective amount of citric acid hydrated by moisture in the **soil** to form ...  
dried **hydrogel**, of iron sulfates from **soil** reactions by citric acid, ...

Controlled release fertilizer

US Pat. 5137563 - Filed Jan 28, 1991

In cases where the in addition to holding water in the **soil** the **hydrogel** substance  
may degrade other coating procedures, such 35 n<sup>o</sup>y act as as an ion ...

Hygrostat and system

US Pat. 5794848 - Filed Jul 16, 1996 - Moss Products Pty Ltd

... which to individual plants in open **soil** where the hygrostat is buried 15 and

... we have found many employs a highly hydroscopic **hydrogel** to flatten a ...

Application of agricultural polyammonium acrylate or polyacrylamide hydrogels

US Pat. 5185024 - Filed Oct 24, 1991 - Aqua Source Inc.

An additional advantage is the slow release acrylic acid which are used for improving **soil** structure. of these materials when applied in **hydrogel** form ...

Container for holding live plants for display and sale for a long duration

US Pat. 6968948 - Filed Aug 15, 2003

Such plants are generally transported in containers having water or **soil**. ...

Because the 50 **hydrogel** retains water well, less water is required for plants ...

Microbiological systems for phosphate extraction and distribution to plant root systems

US Pat. 4589226 - Filed Aug 13, 1984

The nutrient **hydrogel** 48 is comprised of one or more of such gel forming materials

... The phosphorus extraction unit 40 may be placed in the **soil** near the ...

*phosphorous  
pellet  
w/ hydrogel  
placed in soil  
near roots*

Balanced charge polymer and hydrophilic contact lens manufactured therefrom

US Pat. 5270415 - Filed Dec 21, 1990 - Allergan Inc.

... - **hydrogel** contact lenses lies in their tendency to accu- mer such ...

methylmethacrylate, etc. on the **soil** components and the charge associated with p' ...

Powder coated **hydrogel** capsules

US Pat. 5093130 - Filed Sep 26, 1989 - Plant Genetics

... to enhance the effectiveness of anti-fungal agents against **soil** pathogens, but does not teach of the use of such powders for coating **hydrogel** capsules. ...

*GEL CAPSULE*

Process for preparing aqueous solutions of acrylamide polymers

US Pat. 4039498 - Filed Apr 4, 1975 - Labofina S.A.

Other suit- polymer is thus transformed into a **hydrogel** forming able cross-linking agents are the hypochlorous and hy- aggregates with the **soil** particles. ...

Method to enhance inoculation of root systems

US Pat. 5262381 - Filed Apr 8, 1993 - Osaka Gas Co. Ltd.

Control inocula were prepared consisting of 120 ml aliquots of the **soil** ...

inoculum con-trol (inoculum only, mother culture **soil**); 3) a **hydrogel** control ...

**Hydrogel** encapsulated nematodes

US Pat. 4615883 - Filed Oct 23, 1985 - Plant Genetics, Inc.

... to insects inhabiting the **soil** and cryptic habitats including, eg, greenhouses,

... **Hydrogel** agents have been employed for the encapsulation of numerous ...

Process for manufacture of proton conductive polymer gel useful as backfill for sacrificial and impressed current anode systems

US Pat. 6838525 - Filed Mar 20, 2003 - Conceil of Scientific and Industrial Research

Chemical backfills can be helpful in adsorbing/absorbing **soil** moisture to keep the environment ... More recently, **hydrogel** systems have been experimented. ...

Delivery unit of plant tissue

US Pat. 4769945 - Filed Jan 30, 1987 - Kirin Brewery Co., Ltd.

... meristematic tissue 5 is provided on the surface of **hydrogel** and brought into

... Otherwise, the delivery unit was planted in the **soil** in a field until ...

Method for increasing the pH value in acidic **soil**

US Pat. 6484441 - Filed Dec 11, 2000 - Stockhausen GmbH

For example, the addition of 0.4% by weight of copolymer to a **soil** having a ...  
the subsequent vegetation period, depending on the amount of **hydrogel** added. ...

Membrane-coated **hydrogel** encapsulated nematodes

US Pat. 4701326 - Filed May 19, 1986 - Plant Genetics, Inc.

ENCAPSULATED NEMATODES **Hydrogel** agents have been employed for the encapsulation  
of numerous ... ) **soil** and cryptic habitats including, eg, greenhouses, ...

Production of **hydrogel** encapsulated nematodes

US Pat. 4753799 - Filed Sep 14, 1987 - Plant Genetics, Inc.

... to insects inhabiting the **soil** and cryptic habitats including, eg, ...

**Hydrogel** agents have been employed for the encapsulation of numerous ...

Dried particulate hydrophilic gel as micronutrient delivery system

US Pat. 5837029 - Filed Feb 3, 1997 - Tennessee Valley Authority

... material subsequently were hydrated by moisture the **soil** to form continuous,  
gel bands, ... As used herein and applied to the resulting dried **hydrogel**, ...

Dispensing device powered by **hydrogel**

US Pat. 5516527 - Filed Oct 9, 1992 - Pfizer Inc.

... as a result of the internal pressure generated by the swelling **hydrogel**. ...  
as fish tanks, **soil** and aqueous chemical and/or enzymatic reaction systems. ...

Dispensing devices powered by **hydrogel**

US Pat. 5792471 - Filed Apr 19, 1996 - Pfizer Inc.

... as a result of the internal pressure generated by the swelling **hydrogel**. ...  
as fish tanks, **soil** and aqueous chemical and/or enzymatic reaction systems. ...

TABULET

Polyurethane **hydrogel** and method for the production of the same

US Pat. 4118354 - Filed Aug 17, 1976 - Dai-Ichi Kogyo Seiyaku Co., Ltd.

(2) It capable of forming an uniform polyurethane **hydrogel** upon contact with ...  
sea water and fixing marine **soil** various maritime development projects. ...

Coal ash as **soil** amendment to enhance water balance, growth, and harvesting of turfgrasses

US Pat. 6287358 - Filed Dec 11, 1998

This oxidation serves to lower **soil** ph and facilitate the solubility of many ...  
an insoluble swellable polymer comprised of a mixture of a **hydrogel** and an ...

Detergent composition comprising a **soil** entrainment system

US Pat. 6653274 - Filed Sep 5, 2000 - The Proctor & Gamble Company

Most preferably, the 45 **hydrogel**-forming absorbent polymers comprise from about  
50 to about 95%, preferably about 75%, neutralized, slightly network ...

Superabsorbent polymer and process for producing same

US Pat. 5525682 - Filed Jun 7, 1995 - Mitsui Toatsu Chemicals, Inc.

... remaining as a water-insoluble **hydrogel**, and hence suggests that its ...  
sanitary napkins, hygienic tampons and water-holding materials for **soil**, ...

SILICATE GROUT

US Pat. 3294563 - Filed Oct 16, 1963

... **hydrogel** formed from \* ^1^1 polymerised silicic acid. The urne of gelation  
is deter- ... **Soil** Mech. and sive composition it is highly unlikely that ...

Superabsorbent polymer and process for producing same  
 US Pat. 5461085 - Filed Dec 13, 1994 - Mitsui Toatsu Chemicals, Incorporated  
 ... remaining as a water-insoluble **hydrogel**, and hence sug- 5 gests. that its ...  
 materials for **soil**, etc. The gelation power indexes that for sludge 45 ...

Active agent containing **hydrogel** devices wherein the active agent concentration profile contains a sigmoidal concentration gradient for improved constant release, their manufacture and use  
 US Pat. 4749576 - Filed Jun 2, 1986 - Ciba-Geigy Corporation  
 Thus, it is not practical to the like, rain water, **soil** moisture and sea water,  
 ... by covering a loaded **hydrogel** soluble in the aqueous environment of use, ...

Water absorbing composite comprising inorganic powder encapsulated with a crosslinked carboxyl polymer  
 US Pat. 4418163 - Filed Aug 13, 1982 - Kuraray Co., Ltd.  
 If the mixed material is, for example, used with INVENTION **soil** in ... by or with  
 a highly absorbent **hydrogel** separate from the inorganic powder, ...

Active agent containing **hydrogel** devices wherein the active agent concentration profile contains a sigmoidal concentration gradient for improved constant release, their manufacture and use  
 US Pat. 4624848 - Filed May 10, 1984 - Ciba-Geigy Corporation  
 ... rain water, **soil** moisture and sea water, the of drug to be released by ...  
 by covering a loaded **hydrogel** the swollen **hydrogel** upon aqueous activation to ...

Compositions containing synthetic **soil**-extract materials and medicaments based thereon  
 US Pat. 6569416 - Filed Jul 1, 1999 - Lamb Biochemicals Corp.  
 ... commonly referred Synthetic humic acid prepared according to the above to as  
**hydrogel** lenses prepared from monomers such as processes and separation and ...

U.S. Patent 2731340  
 US Pat. 2731340 - Filed Apr 22, 1952  
 ... ooze and 35 parts of lowland marshy **soil** are suspended in an aqueous solution of  
 ... whereby there is precipitated a **hydrogel** of the corresponding mixed ...

Process for preparing synthetic **soil**-extract materials and medicaments based thereon  
 US Pat. 5945446 - Filed Feb 10, 1997 - Laubc Biochemicals, Corporation  
 ... with soft lenses such as those commonly referred referenced herein regarding  
 anti-microbial amounts of to as **hydrogel** lenses prepared from monomers such ...

Hydrophilic, highly swellable hydrogels  
 US Pat. 5840321 - Filed Jul 8, 1996 - Clariant GmbH  
 With regard to the **hydrogel**, the waxes, the application of the wax to the ...  
 However, they can also be used as **soil** conditioners in agriculture and ...

Crosslinked, hydrophilic, highly swellable hydrogels, production thereof and use thereof  
 US Pat. 6297335 - Filed Feb 5, 1999 - BASF Aktiengesellschaft  
 The spraying of the metal salt solution onto the **hydrogel** particles may take place  
 ... However, they can also be used as **soil** improvers in agriculture and ...

Steinernema sp. nematode for suppression of Helicoverpa zea and Spodoptera frugiperda  
 US Pat. 5674516 - Filed May 11, 1995 - The United States of America as represented by the Secretary of Agriculture  
 ... (a Une running parallel with 5 are not limited to **hydrogel** agents such as ...  
 nematodes for 5Q todes used to control other **soil** insect pests [Miller and ...

U.S. Patent 3115532

US Pat. 3115532

... capacity to set to a **hydrogel**, having a ph between about —1 and about 2.5 ...  
retaining in said **soil** substan-tially all the constituents thereof until ...

Water-absorbing, cellular, cross-linked polymers with improved distribution effect, method for their production and their use

US Pat. 6750262 - Filed Sep 4, 2001 - BASF Aktiengesellschaft

... and in a second stage poly-merizing the foam to form an expanded **hydrogel**,  
... a sealing material, a **soil** improver, a **soil** substitute or a packaging ...

Silica based fertilizer and method for using the same

US Pat. 6254656 - Filed Apr 6, 1999 - Fuji Silysia Chemical Ltd.

As the silica gel having the former property, there are silica **hydrogel**, ...  
there is no problem since the excessive fertilizer remains in the **soil** and will ...

Water-absorbing, expanded, crosslinked polymers, the production and use thereof

US Pat. 6136873 - Filed May 4, 1998 - BASF Aktiengesellschaft

The method of claim 6, further comprising adding at 60 **hydrogel** is predominantly or  
... after the first stage and and as **soil** substitute for growing plants. ...

Water-absorbent or water-retention material and production method thereof

US Pat. 6303711 - Filed Apr 10, 2000 - Sanyo Chemical Industries, Ltd.

In addition, even if the **hydrogel** is left under alkaline conditions at high ...  
if it is used as a water-retainer for **soil** or as cold insulation which is ...

In situ forming hydrogels

US Pat. 6858229 - Filed Apr 26, 2000 - California Institute of Technology

Sawhney et al., "Optimization of photopolymerized bio- erodible **hydrogel** properties  
... Zhang et al., "Biodegradable of Aromatic Hydrocarbons in **Soil**-water ...

Entomopathogenic nematode for control of insect pests

US Pat. 7014859 - Filed Jul 18, 2002 - University of Florida Research Foundation, Inc.

When entomopathogenic nematodes are applied to **soil** in Florida, ... this type  
include but are not limited to **hydrogel** agents such as alginate gels (US Pat. ...

Aqueous microhydrogel dispersions, processes for producing the same, and processes for producing microhydrogels

US Pat. 4272422 - Filed Jul 10, 1979 - Japan Exlan Company Limited

35 However, it is acknowledged that, when a **hydrogel** is mixed with a ... ability as  
an water absorbent, moisture absorbent, or **soil** improving agent. ...

Hydrophilic hydrogels with a high swelling capacity and method for producing and using them

US Pat. 6602950 - Filed Apr 6, 2001 - BASF Aktiengesellschaft

**hydrogel** particles is effected by spraying with solutions of divalent or more  
... But they may also be used as **soil** improvers in agriculture and market ...

Fertilizers

US Pat. 4402725 - Filed Mar 6, 1981 - Bayer Aktiengesellschaft

... to the invention in the case of the following decorative plants, in **soil** ...  
A fertiliser based on a **hydrogel** containing plant nutrients comprising a ...

Encapsulated earthworm cocoons

US Pat. 5127186 - Filed Jul 19, 1991 - Advanced Biotechnology, Inc.

The encapsulation of nematodes in **hydrogel** matrixes CROSS- ... SUMMARY OF THE



INVENTION The beneficial effect of earthworms in the soil on the The objects ...

Temperature sensitive water absorbing and discharging polymer composition

US Pat. 5672656 - Filed Sep 5, 1995 - Kohjin Co., Ltd.

That is, the **hydrogel** scarcely shows water ,0 P3! ... higher than a certain tural fields for Plants and vegetables such as **soil water hydrogel** is non-ionic, ...

Water-removing material usable for hydrophobic liquids and process for producing the same

US Pat. 4507204 - Filed Feb 23, 1982 - Japan Exlan Company Limited

... cause such a fiber form **hydrogel** to ex- HYDROPHOBIC LIQUIDS AND PROCESS FOR ... to **soil-improving** 30 fiber outer layer is composed of a **hydrogel** and the ...

Biocompatible polyurea-urethane hydrated polymers

US Pat. 5175229 - Filed Jul 3, 1991 - W. R. Grace & Co.-Conn.

... (Asao) teaches a **soil** stabilization method in which a polyurethane prepolymer ... Typically, prior **hydrogel** systems have re-quired that the polyols and ...

Manufacturing method of absorbent resin

US Pat. 6291636 - Filed Apr 7, 1999 - Nippon Shokubai Co., Ltd.

... 0.1 and 2 parts by weight with respect to 100 parts by weight of the **hydrogel**. ... such as water-retaining mate-rials for building materials or **soil**, ...

Protein non-adsorptive polyurea-urethane polymer coated devices

US Pat. 5169720 - Filed Mar 6, 1991 - W. R. Grace & Co.-Conn.

... (Asao) teaches a **soil** stabilization method in which a polyurethane prepolymer ... Typically, prior **hydrogel** systems have re-quired that the polyols and ...

Preparation of particulate gels

US Pat. 4542176 - Filed Nov 5, 1984 - National Research Development Corporation

... as **soil** conditioners; as humectants: for example in dried foods, tobacco, ... In comparative tests, colourless unswollen **hydrogel** was cominuted by ...

Adsorptive removal of sulfur compounds from fatty materials

US Pat. 5298638 - Filed May 5, 1992 - W. R. Grace & Co.-Conn.

For example, the silica **hydrogel** drogel for purposes of removing sulfur compounds may ... from the **soil** as nutrients, 40 acid-treated hydrogels may be used. ...

Method for producing water-swellaable hydorphilic polymers, said polymers and use thereof

US Pat. 6565768 - Filed Apr 6, 2001 - BASF Aktiengesellschaft

Optionally, the **hydrogel** particles may be further modified 5 by admixture of ... But they may also be used as **soil** improvers in agriculture and market ...

Water-absorbent or water-retention material and production method thereof

US Pat. 6130304 - Filed May 13, 1997 - Sanyo Chemical Industries, Ltd.

(7) Since the **hydrogel** of the water-absorbent or water- 15 retention material ... if it is used as a water-retainer for **soil** or as cold insulation which is ...

Protein nonadsorptive membranes for wound dressings

US Pat. 5462536 - Filed Jul 14, 1993 - Hampshire Chemical Corp.

Drugs can be physically incorporated into the **hydrogel** by impregnation of the ... water or may be reacted with water present in or flowing through the **soil**. ...

Sealing method using latex-reinforced polyurethane sewer sealing composition

US Pat. 4315703 - Filed Jun 25, 1979 - Minnesota Mining and Manufacturing Company

By contrast the latex-reinforced **hydrogel** of 10 .microns, preferably 0.1 to ...  
of about 100:1 to 1:1 (preferably 90:1 to 10:1) of gration into the surrounding **soil**. ...

Latex-reinforced polyurethane sewer sealing composition  
US Pat. 4476276 - Filed Apr 23, 1981 - Minnesota Mining and Manufacturing Company  
By contrast the latex-reinforced **hydrogel** of weight ratio of prepolymer to ...  
water to provide a weight ratio of gration into the surrounding **soil**. ...

Water-absorbing agent, method for the production and the utilization thereof  
US Pat. 6831122 - Filed Nov 13, 2003 - BASF Aktiengesellschaft  
A method of improving the condition of a **soil** com- 50 prising contacting said  
... water absorbent polymer is in the form of a comminuted **hydrogel** having a ...

Low permeability waste containment construction and composition containing granular activated  
carbon and method of making  
US Pat. 5591118 - Filed Nov 12, 1993  
BACKGROUND OF THE INVENTION 20 In the prior art, **soil**-bentonite slurry walls have  
... organophilic clays, silica **hydrogel**-base compositions, fibers such as ...

Novel water-swellaable fibers having a high degree of water-swellaability and excellent physical  
properties and process for producing the same  
US Pat. 4366206 - Filed Aug 24, 1981 - Japan Exlan Co., Ltd.  
sandbags, artificial **soil**, artificial sphagnum moss, mate-rials for keeping warm  
... (3) Volume ratio (V%) of **hydrogel** outer layer A microscopic photograph ...

Adhesive and resulting nonwoven fabric  
US Pat. 4381332 - Filed Jan 19, 1982 - W. R. Grace & Co.  
The Win- with the prepolymer and then injected into the **soil**. ... substances are  
daily when large quantities of isocyanate are used. **hydrogel** to prevent ...

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hydrogel soil

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